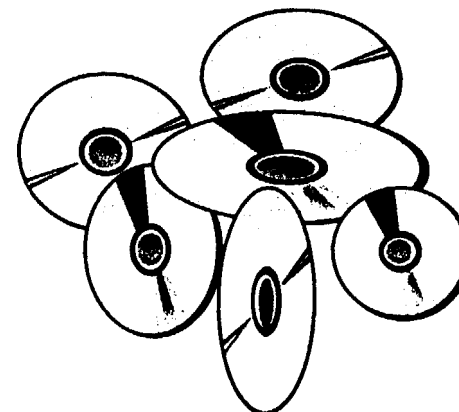


Compact Disk Engineering Data Exchange (CDEX)

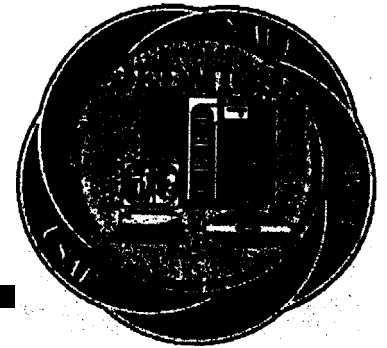


John Montgomery, Lead Engineer

**AMC Engineering Data Management Systems
Program Management Office**



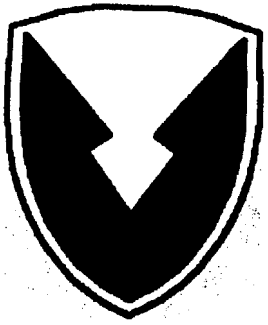
Purpose



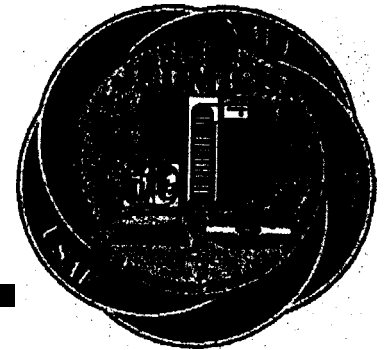
Information Briefing

Compact Disk Engineering Data Exchange (CDEX)

- **A technology enabler for exchange of digital engineering / technical data between government and industry.**
- **A replacement process for aperture cards**



Agenda



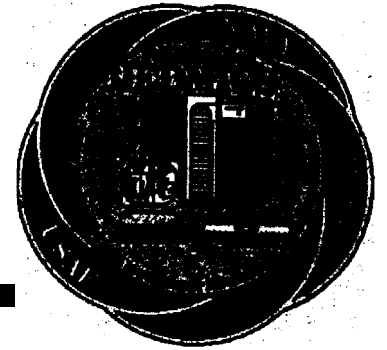
- EDMS PMO Introduction
- Overview of DOD / AMC CDE× Projects
- Status of MICOM CDE× Project
- Discussion of MICOM Process Improvements
- Demonstration of CDEX Output
... What industry can expect.



Ask Question Anytime !



EDMS PMO Introduction

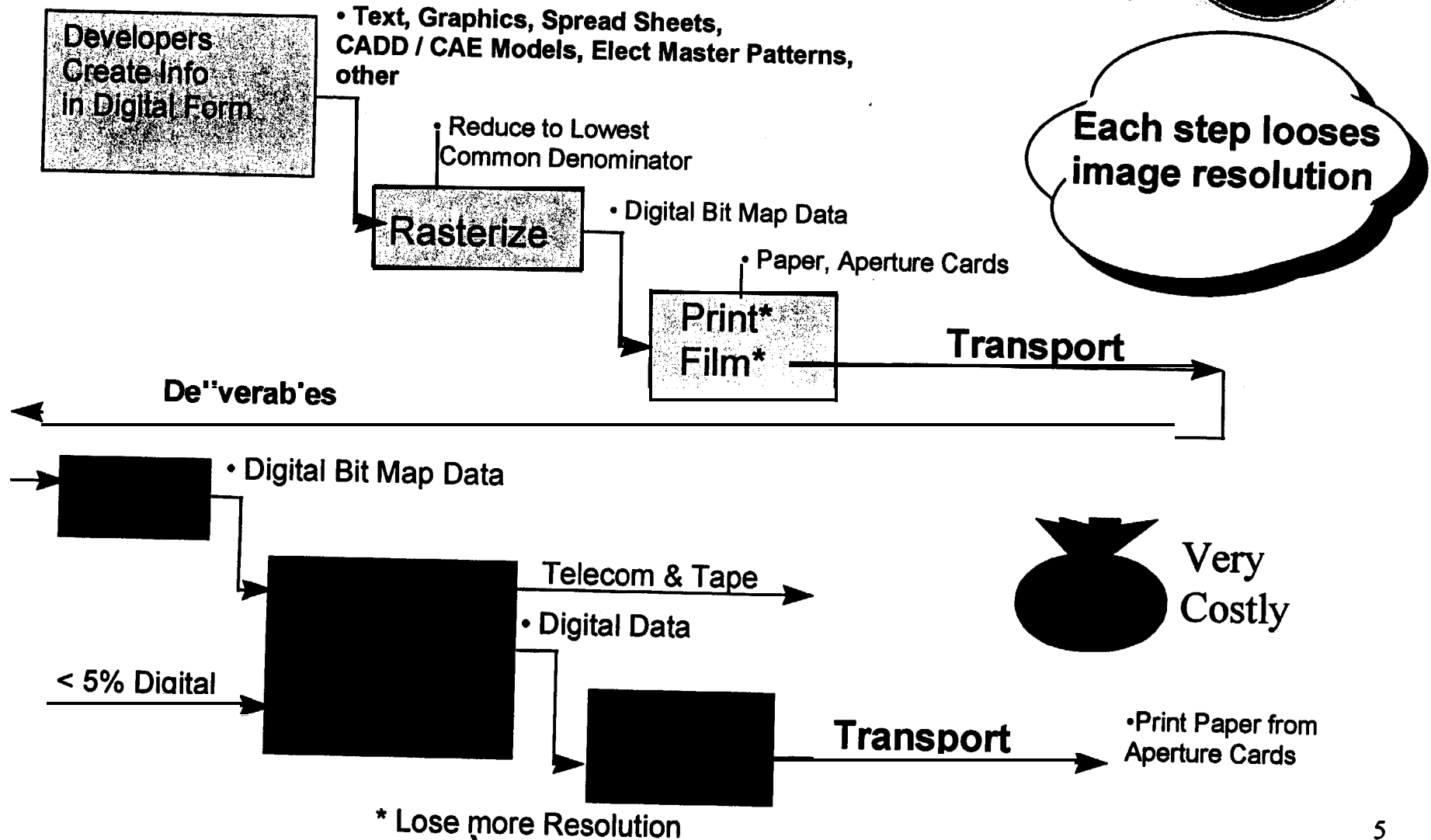
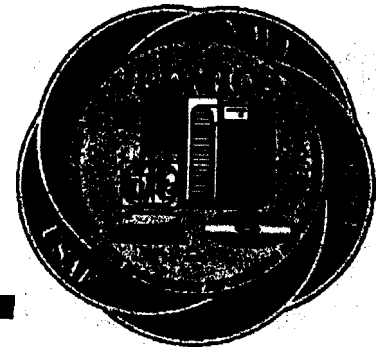


- AMC Chartered Program Office
 - Established Jan. 1994 by AMC Commander.
 - Assigned to MICOM Corporate Information Center (CIC)
 - Report thru MG Link to BG Beauchamp, AMCRDE
- Responsibilities:
 - Engineering / Technical Data Repository
 - Configuration Management System
 - EDM Interfaces to other Acquisition & Logistics systems
 - Army JEDMICS Component Office
(Joint Engineering Data Management Information Control System)
Mr. Henry Younger is JEDMICS Deputy PM
 - MICOM EDM Systems and MICOM TDP Process



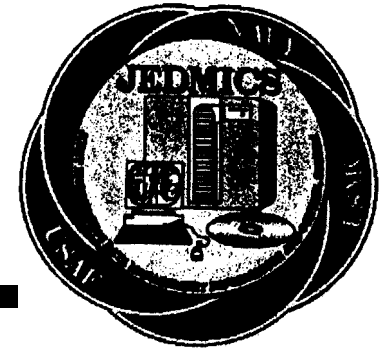
Today's Business Process

Based on 30 year old Aperture Card Technology

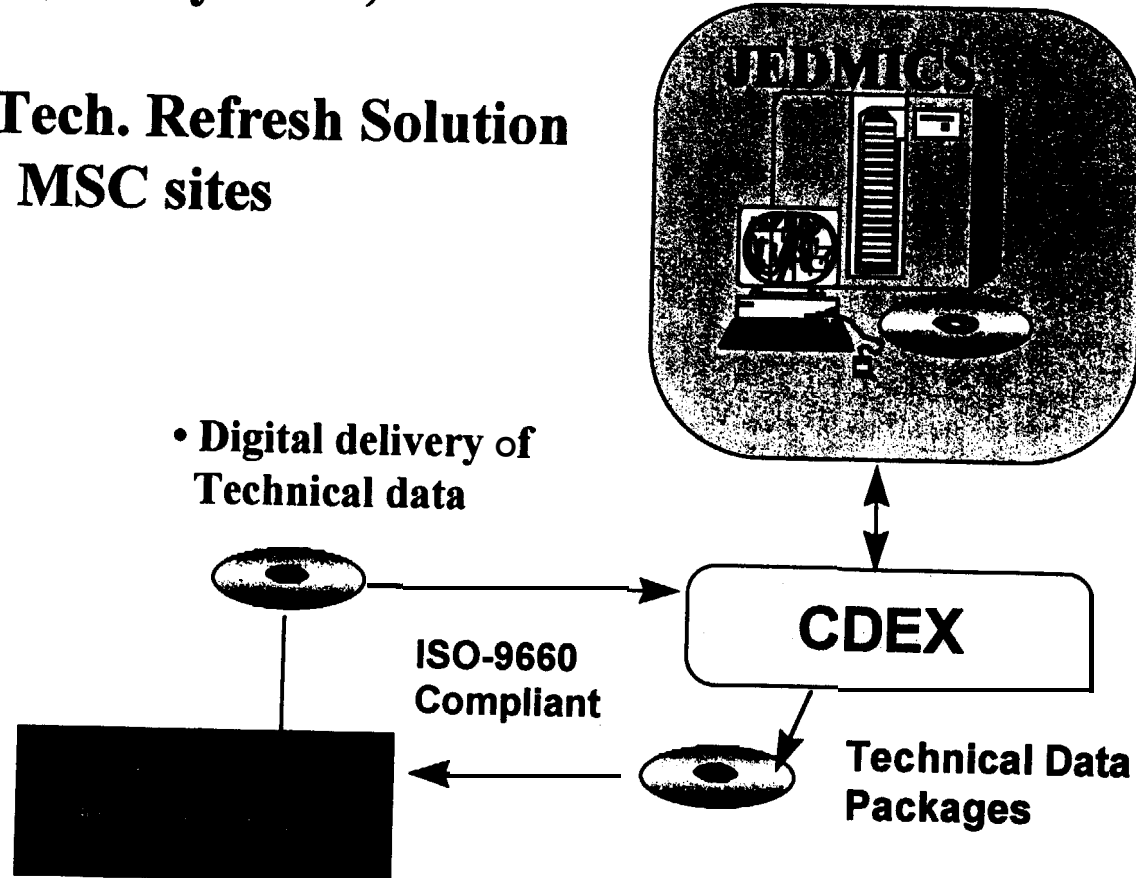
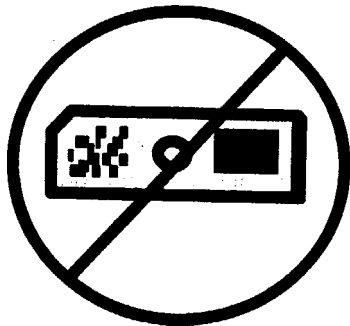




DOD CDEX Initiative

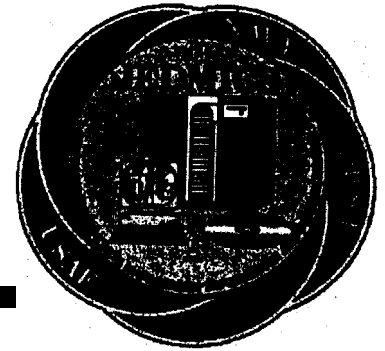


- OSD Directed CALS Business Process Improvement Project
- Joint Participation, Army Lead, DLA, AF, Navy
- O3 JEDMICS Tech. Refresh Solution
- HQ AMC funded MSC sites

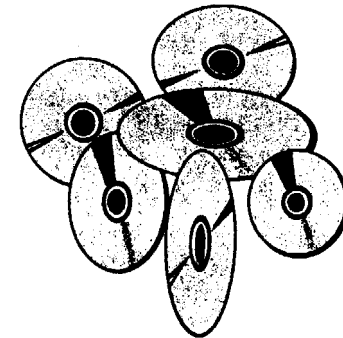




CDEX Components



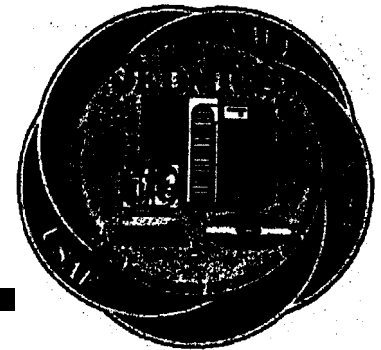
- **Government Standard System Interface Specification**
 - ISO-9660 and CALS Compliant,
 - Data Construct & Conventions compatible w/JEDMICS
 - Coordinated via JEDMICS Community,
 - Allows primes to deliver data to gov't using COTS
- **JEDMICS CD Data Input Software (e.g. PC_JEDMICS)**
- **JEDMICS Data Output Interface**
 - Interface Definition for JEDMICS I/O
 - Middle-Ware Software using JEDMICS GOS
- **Royalty Free On-Disk Software**
 - Gov't owned viewer (ImageR) + Table of Contents Manager (IndexR)
- **Validated Business Process with Documented Lessons Learned**





DOD / AMC

CDEX Project Status

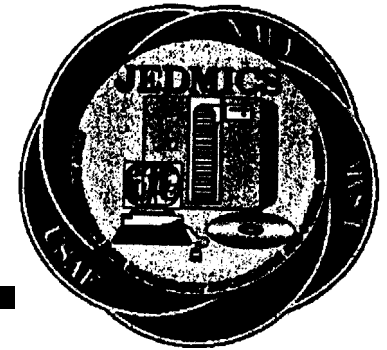


- OSD Funded Development / Validation Project
 - All Software Development
 - MICOM Production CDEX funded by OSD
 - One Navy, One USAF validation site
 - Validation / Demonstration of process
- AMC Funded remaining 5 MSC sites and 6 Depots
- CDEX accepted as DOD solution by JEDMICS PM
 - 4 Navy sites funded FY 96
 - 10 Navy planned for FY 97 Technology Refresh
- DLA buy in ... one site funded FY 96 .. two sites planned FY 97
- USAF evaluating plan for all ALC sites.

**** CDEX funded for 17 of the 32 DOD JEDMICS sites**



AMC CDEX Initiative



- Provide an enabler to eliminate aperture cards by Feb 97. (per GEN Wilson)
- Implement at 6 MSCs and 5 depots (funded)
- Provide simple process for digital data input to JEDMICS from industry. (no MIL-STD)

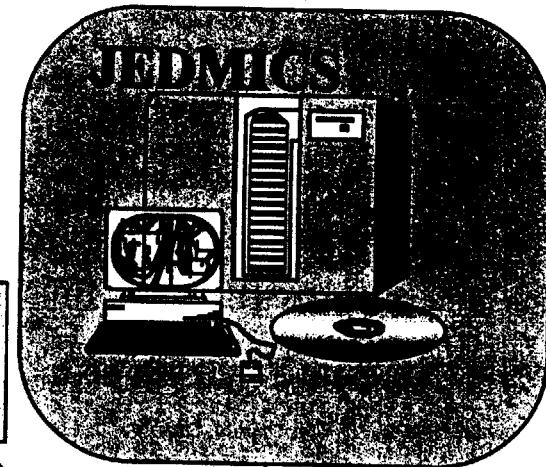


350% ROI
1 year

- Digital delivery of Technical data



DSREDS
Interim Interface



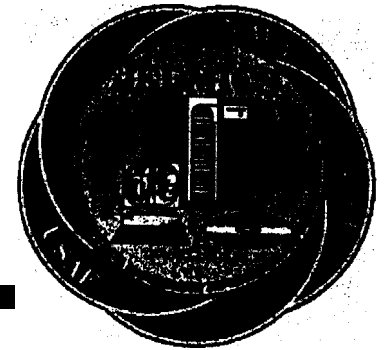
CDEX

ISO-9660
Compliant

Technical Data
Packages



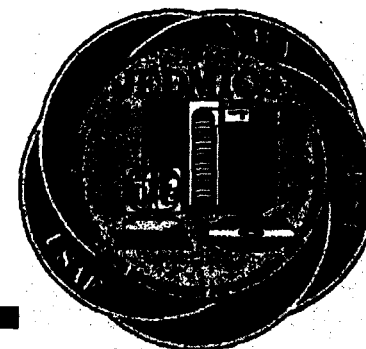
Phased Game Plan



1. Address Bid Set Process first
 - Interim Interface to DSREDS I/G Server for TDP data
 - Begin Business Process changes while migrating to JEDMICS
 - "Plug-and-Play" with JEDMICS as it is fielded
2. JEDMICS Upload Process (Repository Transfers)
 - Support DLA Consumable Item Transfer Phase II
3. Specification for Delivery of Contract Data
 - Compatibility with ISO-9660 based COTS CD-R equipment
 - Validate Industry delivery of data to JEDMICS
4. Address Multiple Data Types of Engineering/Technical data.



AMC JEDMICS / CDEX Combined Schedule



<u>Location</u>	<u>Migration Engine</u>	<u>System Fillout</u>	<u>JEDMICS IOC</u>	<u>CDEX Phase I (B)</u>	<u>CDEX JEDMICS (C)</u>
RIA	May 95	Jul 95	Jan 96	..	Sep 96 (A)
CECOM	July 95	Jul 96	Sep 96 (1)	26 Mar 96	Sep 96
MICOM	Feb 96	Feb 96	Aug 96 (3)	12 Jan 96	Aug 96
ATCOM	Mar 96	Aug 96	Oct 96 (4)	14 Feb 96	Sep 96
TACOM	Mar 96	Oct 96	Dec 96 (4)	Jun 96	Oct 96
ARDEC	Aug 96	Oct 96	Jan 97 (4)	Aug 96	Nov 97

(A) 1 Apr 96 DSREDS stand down. CDEX H/W delivery delayed 3 mths due to SBA contract issue.

(B) Phase I. DSREDS CALS Server I/F to work Business Process Issue..

(C) Full Capability. Dependent on both JEDMICS IOC and CDEX H/W delivery

Each site must work internal Business Process as part of JEDMICS

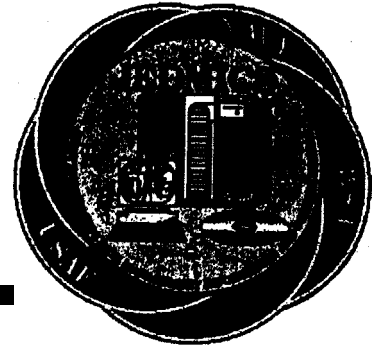
(1) Adjusted for site move to on-post June 96

(3) Adjusted to coincide with release of Baseline 2.5

(4) Joint OSD funding for fill outs received April 96



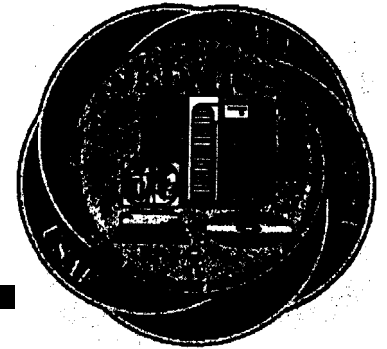
MICOM CDEX Status



- Interim DSREDS Interface Installed 12 Jan 96
 - Validate the business process
- Issued several live solicitations where TDP included CAD files
 - Received excellent industry feedback
- MICOM Production CDEX install 22 Aug 96
- JEDMICS IOC began Aug 96 ... planned production Jan 97.
- MICOM Business Process Re-engineering underway
 - Reproduction Requests, Digital TDP Preparation
 - Evaluating Interface to put Solicitation data on disk
- MICOM August Delivery of Consumable Item Transfer data to Richmond VA accomplished using CDEX
 - 1600 images in 45 minutes (5 times faster than tape)
- Currently working of Industry data delivery process



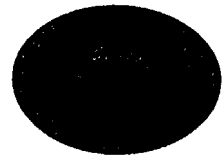
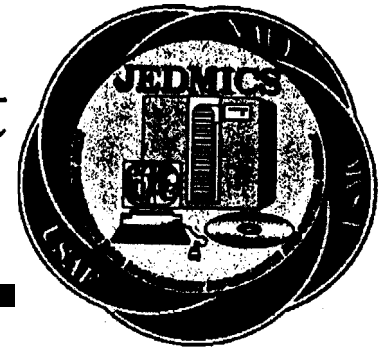
Focus Areas for Business Process Re-Engineering



- **Technical Data Acceptance**
 - • **Digital Media e.g. CDEX and EDI**
 - • **Multiple Data Types**
- **TDP Assembly & Validation Process**
- **Acquisition Center Processes e.g. Solicitation Data**



Data Delivery to Government Using CDEX



- International Std. ISO-9660
NOT MIL-STD
- Multiple Data Formats

X JEDMICS Server (UNIX)

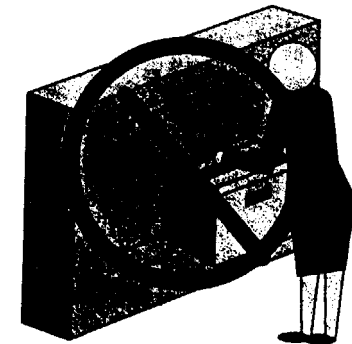
PC_JEDMICS

- Upload Data
- Validate Transfer

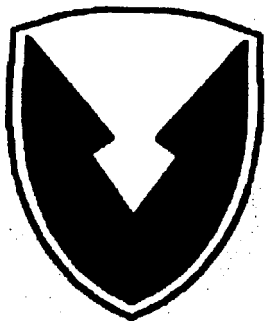


JEDMICS
Digital Data
- Optical Storage

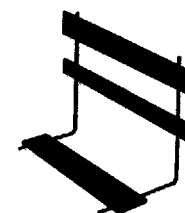
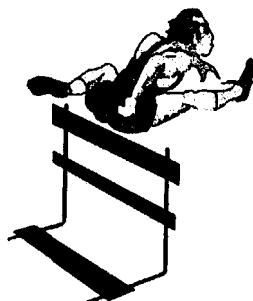
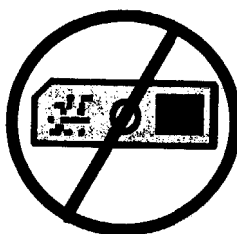
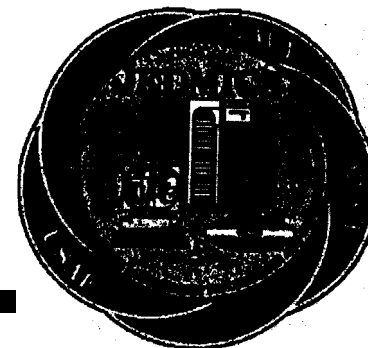
- Draft Interface Spec. in process
- Industry participation LVS/MLRS
- Subsequent contract modification for data delivery to government.
- PC_JEDMICS Available Oct. 96 ...
Direct access to JEDMICS by users
- Eliminates filming & scanning ...
- No loss of image resolution = better legibility



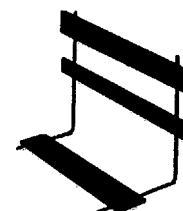
- Revised DoD 5000 ... New contracts FY 97 require digital data delivery



Challenge

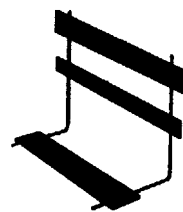


MSCs
Business Process
Re-Engineering

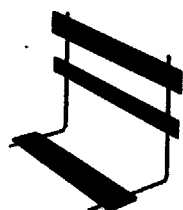


DOD / AMC Guidance:
• Change Policy
• Buy Digital Data

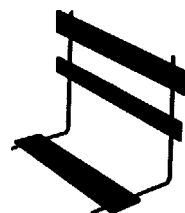
MSCs Implement
JEDMICS 2.5



Validate
& Prove Out
Process



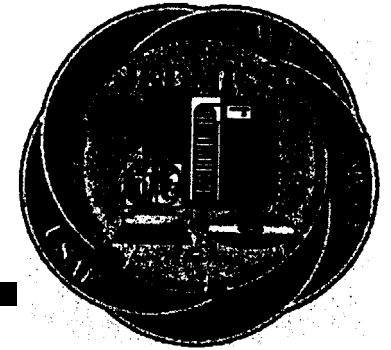
Develop
Technical
Solution



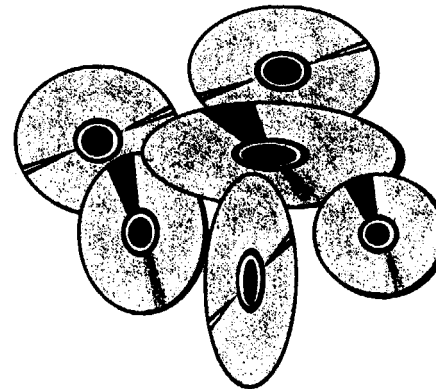
Need, Requirements
& Coordination



Demonstration



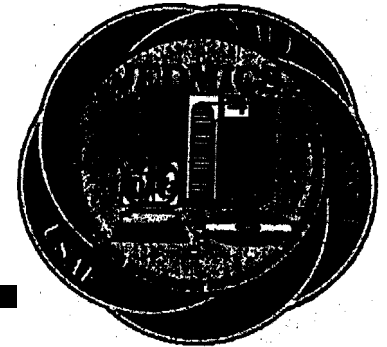
What the end user can expect.



- What the user must have to use the CD
- Improvements to the process e.g.
 - Legibility, Redlining, Local Printing
 - Cost Savings, ALT Reduction



Further Information



Henry Younger, EDMS PM
or John Montgomery, Lead Engineer

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